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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/627,194      | 07/24/2003  | Sankar Sambasivan    | 7125                | 2708             |

22922            7590            11/28/2007  
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|----------|
| EXAMINER |
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SPEER, TIMOTHY M

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
| 1794     |              |

|            |               |
|------------|---------------|
| MAIL DATE  | DELIVERY MODE |
| 11/28/2007 | PAPER         |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

|                              |                        |                     |
|------------------------------|------------------------|---------------------|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |
|                              | 10/627,194             | SAMBASIVAN ET AL.   |
| <b>Examiner</b>              | <b>Art Unit</b>        |                     |
| Timothy M. Speer             | 1794                   |                     |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 27 August 2007.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-17 and 22 is/are pending in the application.  
 4a) Of the above claim(s) 9-17 is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-8 and 22 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

|  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application |
|  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Election/Restrictions*

1. Applicant's election of Group I in the reply filed on 08/27/07 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, 3, and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Watanabe (USPN 3,709,723).

4. Watanabe teaches articles comprising a metal substrate coated with an aluminum phosphate coating (see Example 1, for instance). Regarding claim 2, the films necessarily will exhibit an aluminum content that is less than stoichiometric, greater than stoichiometric or stoichiometric with respect to the phosphorous content, since they are aluminum phosphate coatings.

5. Regarding the terms "substantially amorphous" and "substantially non-porous", it is noted that the term "substantially" is a broad term. See MPEP 2173.05(b)(D). Moreover, applicant has failed to define these terms in the specification. Accordingly, it is the Examiner's position that the coatings of Watanabe meet these broad limitations. Regarding the claimed "component" between the substrate and the film, since the coatings and substrates of Watanabe are the same as

those presently claimed, it is the Examiner's position that the coating will interact with the substrate to form such a "component."

6. Regarding claim 3, Watanabe teaches that the films may additionally include metal particles, such as silica or iron oxide (see Examples). Therefore, Watanabe meets instant claim

3.

7. With respect to claim 22, since the articles of Watanabe are formed from the same materials as disclosed in the subject specification, it is the Examiner's position that the articles of Watanabe will necessarily exhibit the claimed surface energy.

8. In light of the above, it is the Examiner's position that the present claims are anticipated by Watanabe.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 4-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe.

11. Watanabe was discussed above. Regarding claim 4, Watanabe teaches metal substrates, generally, and, accordingly, it would have been obvious to one having ordinary skill in the art to employ a steel substrate. This being done, the film would form a bond with the metal oxides of the substrate.

12. With respect to claims 5, 6, and 8, optimizing the thickness of the coating is clearly within the level of ordinary skill in the art and to do so would have been obvious to one having ordinary skill in the art.

13. Finally, regarding claim 7, Watanabe fails explicitly to teach an organic coating over the aluminophosphate coating. However, such coatings are conventional in the art and are employed to provide protection to the underlying coating and substrate, such as by imparting improved water resistance.

14. In light of the above, it is the Examiner's position that the present claims are obvious in view of Watanabe.

*Conclusion*

15. Rejections made in the previous Office Action but not repeated herein are withdrawn

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy M. Speer whose telephone number is 571-272-8385.

The examiner can normally be reached on M-F.

17. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith D. Hendricks can be reached on 571-272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

18. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR

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system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Timothy M. Speer